

09/775938
STN Search Summary

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FILE 'CAPLUS' ENTERED AT 14:04:24 ON 12 FEB 2003

L1 625 S BRYOSTATIN? OR BRYOPYRAN?
L2 9 S L1 AND POLYKETIDE?
L3 6 S L1 AND BIOSYNTHES?
L4 7 S L2 NOT L3
L5 4 S L3 NOT L2
L6 137 S POLYKETIDE AND MARIN?
L7 140 S POLYKETIDE AND (MARINE? OR AQUA?)
L8 26 S (POLYKETIDE (2W) SYNTH?) AND (MARINE? OR AQUA?)
L9 23 S L8 NOT L2
L10 23 S L9 NOT L5
L11 1 S POLYKETIDE AND CANDIDATUS
L12 2 S POLYKETIDE AND ENDOBUGULA
L13 3 S POLYKETIDE AND BUGULA

L2 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2003:20492 CAPLUS
TI A Concise, Selective Synthesis of the Polyketide Spacer Domain
of a Potent Bryostatin Analogue
AU Wender, Paul A.; Mayweg, Alexander V. W.; VanDeusen, Christopher L.
SO Organic Letters (2003), 5(3), 277-279

L2 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2002:366741 CAPLUS
TI Structural and stereochemical diversity from (.+-.)-2,2-dimethyl-8-
oxabicyclo[3.2.1]oct-6-en-3-one - application to the synthesis of
polyketide segments of natural products
AU Vakalopoulos, Alexandros; Smits, Rene; Hoffmann, H. Martin R.
SO European Journal of Organic Chemistry (2002), (9), 1538-1545

L2 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:761122 CAPLUS
TI Evidence for the biosynthesis of bryostatins by the bacterial
symbiont Candidatus Endobugula sertula of the bryozoan Bugula neritina
AU Davidson, S. K.; Allen, S. W.; Lim, G. E.; Anderson, C. M.; Haygood, M. G.
SO Applied and Environmental Microbiology (2001), 67(10), 4531-4537

L2 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:139776 CAPLUS
TI Asymmetric Synthesis of the Northern Half C1-C16 of the
Bryostatins
AU Vakalopoulos, A.; Lampe, T. F. J.; Hoffmann, H. M. R.
SO Organic Letters (2001), 3(6), 929-932

L2 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:115276 CAPLUS
TI Marine organism nucleic acids encoding enzymes for the biosynthesis of
bryostatins, bryopyrans and polyketides
IN Haygood, Margo; Davidson, Seana K.; Allen, Scott W.; Hildebrand, Mark
PA Regents of the University of California, USA
SO PCT Int. Appl., 233 pp.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001011024	A2	20010215	WO 2000-US21326	20000804
	EP 1212408	A2	20020612	EP 2000-953836	20000804
	US 2002081665	A1	20020627	US 2001-775938	20010131
PRAI	US 1999-147283P	P	19990804		
	WO 2000-US21326	W	20000804		

L2 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2000:690122 CAPLUS
TI High stereochemical diversity and applications for the synthesis of marine
natural products: a library of carbohydrate mimics and polyketide
segments
AU Misske, Andrea M.; Hoffmann, H. Martin R.
SO Chemistry--A European Journal (2000), 6(18), 3313-3320

L2 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2000:61710 CAPLUS
TI Synthesis highlights: a review of the literature for 1998
AU Quayle, Peter
SO Annual Reports on the Progress of Chemistry, Section B: Organic Chemistry
(1999), 95, 235-263

L2 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 1996:711189 CAPLUS
TI In vitro biosynthetic studies of the bryostatins, anti-cancer
agents from the marine bryozoan Bugula neritina
AU Kerr, Russell G.; Lawry, Joseph; Gush, Kim A.
SO Tetrahedron Letters (1996), 37(46), 8305-8308

L2 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 1989:213181 CAPLUS
TI Asymmetric synthesis and its applications: towards the synthesis of
bryostatin 1
AU Masamune, Satoru
SO Pure and Applied Chemistry (1988), 60(11), 1587-96

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS
AN 2002:589776 CAPLUS
TI Drugs from the seas - current status and microbiological implications
AU Proksch, P.; Edrada, R. A.; Ebel, R.
SO Applied Microbiology and Biotechnology (2002), 59(2-3), 125-134

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS
AN 2002:132136 CAPLUS
TI Evolutionary biosynthesis of anticancer drugs
AU Pettit, George R.
SO ACS Symposium Series (2001), 796(Anticancer Agents), 16-42

L10 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:859132 CAPLUS
 ✓ TI A polyketide synthase-peptide synthetase
 gene cluster from an uncultured bacterial symbiont of Paederus beetles
 AU Piel, Jorn
 SO Proceedings of the National Academy of Sciences of the United States of
 America (2002), 99(22), 14002-14007

L10 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:758540 CAPLUS
 TI The barbamide biosynthetic gene cluster: a novel marine
 cyanobacterial system of mixed polyketide synthase
 (PKS)-non-ribosomal peptide synthetase (NRPS) origin involving an unusual
 trichloroleucyl starter unit
 AU Chang, Zunxue; Flatt, Patricia; Gerwick, William H.; Nguyen, Viet-Anh;
 Willis, Christine L.; Sherman, David H.
 SO Gene (2002), 296(1-2), 235-247

L10 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:725385 CAPLUS
 TI A Gene Cluster from a Marine Streptomyces Encoding the
 Biosynthesis of the Aromatic Spiroketal Polyketide Griseorhodin A
 AU Li, Aiyang; Piel, Jorn
 SO Chemistry & Biology (2002), 9(9), 1017-1026

L10 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:667674 CAPLUS
 TI Polyunsaturated fatty acid synthesis: what will they think of next?
 AU Wallis, James G.; Watts, Jennifer L.; Browse, John
 SO Trends in Biochemical Sciences (2002), 27(9), 467-473

L10 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:484361 CAPLUS
 ✓ TI Structure and regulation of the omega-3 polyunsaturated fatty acid
 synthase genes from the deep-sea bacterium Photobacterium profundum strain
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 AU Allen, Eric E.; Bartlett, Douglas H.
 SO Microbiology (Reading, United Kingdom) (2002), 148(6), 1903-1913

L10 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:471565 CAPLUS
 ✓ TI Biosynthesis of polyunsaturated fatty acids by polyketide
 synthases
 AU Kaulmann, Ursula; Hertweck, Christian
 SO Angewandte Chemie, International Edition (2002), 41(11), 1866-1869

L10 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:355992 CAPLUS
 TI Genomic sequence and evolution of marine cyanophage P60: A new
 insight on lytic and lysogenic phages
 AU Chen, Feng; Lu, Jingrang
 SO Applied and Environmental Microbiology (2002), 68(5), 2589-2594

L10 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:198784 CAPLUS
 TI Plumbing the depths of PUFA biosynthesis: a novel polyketide synthase-like pathway from marine organisms
 AU Napier, Johnathan A.
 SO Trends in Plant Science (2002), 7(2), 51-54

L10 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:925484 CAPLUS
 TI Synthesis of C13-C22 fragment of the marine sponge polyketide callistatin A
 AU Dias, Luiz C.; Meira, Paulo R. R.
 SO Tetrahedron Letters (2002), 43(2), 185-187

L10 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:634532 CAPLUS
 TI Nucleotide sequence and predicted functions of the entire Sinorhizobium meliloti pSymA megaplasmid
 AU Barnett, Melanie J.; Fisher, Robert F.; Jones, Ted; Komp, Caridad; Abola, A. Pia; Barloy-Hubler, Frederique; Bowser, Leah; Capela, Delphine; Galibert, Francis; Gouzy, Jerome; Gurjal, Mani; Hong, Andrea; Huizar, Lucas; Hyman, Richard W.; Kahn, Daniel; Kahn, Michael L.; Kalman, Sue; Keating, David H.; Palm, Curtis; Peck, Melicent C.; Surzycki, Raymond; Wells, Derek H.; Yeh, Kuo-Chen; Davis, Ronald W.; Federspiel, Nancy A.; Long, Sharon R.
 SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(17), 9883-9888

L10 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:528511 CAPLUS
 TI Production of polyunsaturated fatty acids by polyketide synthases in both prokaryotes and eukaryotes
 AU Metz, James G.; Roessler, Paul; Facciotti, Daniel; Levering, Charlene; Dittrich, Franziska; Lassner, Michael; Valentine, Ray; Lardizabal, Kathryn; Domergue, Frederic; Yamada, Akiko; Yazawa, Kazunaga; Knauf, Vic; Browne, John
 SO Science (Washington, DC, United States) (2001), 293(5528), 290-293

L10 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:51336 CAPLUS
 TI Cloning, sequencing and analysis of the enterocin biosynthesis gene cluster from the marine isolate "Streptomyces maritimus": evidence for the derailment of an aromatic polyketide synthase
 AU Piel, Jorn; Hertweck, Christian; Shipley, Paul R.; Hunt, Deanna M.; Newman, Mark S.; Moore, Bradley S.
 SO Chemistry & Biology (2000), 7(12), 943-955

L10 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:895549 CAPLUS
 TI A plant-like biosynthesis of benzoyl-CoA in the marine bacterium 'Streptomyces maritimus'
 AU Hertweck, C.; Moore, B. S.
 SO Tetrahedron (2000), 56(46), 9115-9120

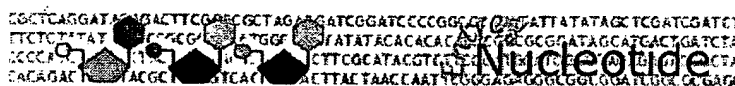
L10 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 2000:493686 CAPLUS
TI Schizochytrium polyketide synthase genes and
transgenic plants for polyunsaturated long chain fatty acid production
IN Facciotti, Daniel; Metz, James George; Lassner, Michael
PA Calgene, LLC, USA
SO PCT Int. Appl., 303 pp.

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PI	WO 2000042195	A2	20000720	WO 2000-US956	20000114
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	EP 1147197	A2	20011024	EP 2000-904357	20000114
	BR 2000008760	A	20021008	BR 2000-8760	20000114
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PRAI	US 1999-231899	A	19990114		
	WO 2000-US956	W	20000114		

L10 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2003 ACS
AN 1998:806788 CAPLUS
TI Polyketide synthesis genes of marine
microbes and production of polyunsaturated fatty acids and PUFA-containing
plant oils with transgenic plants
IN Facciotti, Daniel; Metz, James George; Lassner, Michael
PA Calgene, LLC, USA
SO PCT Int. Appl., 153 pp.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9855625	A1	19981210	WO 1998-US11639	19980604
	EP 1003869	A1	20000531	EP 1998-925264	19980604
	BR 9809946	A	20000801	BR 1998-9946	19980604
	US 6140486	A	20001031	US 1998-90793	19980604
	JP 2002510205	T2	20020402	JP 1999-502926	19980604
PRAI	US 1997-48650P	P	19970604		
	WO 1998-US11639	W	19980604		

L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1996:711189 CAPLUS
TI In vitro biosynthetic studies of the bryostatins, anti-cancer agents from
the marine bryozoan Bugula neritina
AU Kerr, Russell G.; Lawry, Joseph; Gush, Kim A.
CS Dep. Chem. Biochem., Florida Atlantic Univ., Boca Raton, FL, 33431, USA
SO Tetrahedron Letters (1996), 37(46), 8305-8308



□1: U65015. *Vibrio furnissii* ...[gi:1732198]

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5101 accgacgctg cgtgcagcgg tc

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//

Revised: July 5, 2002.

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PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Books
Search	Protein	<input checked="" type="checkbox"/> for					Go	Clear
		Limits	Preview/Index	History	Clipboard	Details		
Display	default	<input checked="" type="checkbox"/> Show	20	<input checked="" type="checkbox"/> Send to	File	<input checked="" type="checkbox"/> Get Subsequence		

☐ 1: P96166. N-ACETYLGLUCOSAMINE-6-PHOSPHATE DEACETYLASE (GLCNAC 6-P DEACETYLASE).

BLink, Domains, Links

LOCUS NAGA_VIBFU 399 aa linear BCT 15-JUL-1998
DEFINITION N-ACETYLGLUCOSAMINE-6-PHOSPHATE DEACETYLASE (GLCNAC 6-P DEACETYLASE).
ACCESSION P96166
VERSION P96166 GI:3122428
DBSOURCE swissprot: locus NAGA_VIBFU, accession P96166;
class: standard.
created: Jul 15, 1998.
sequence updated: Jul 15, 1998.
annotation updated: Jul 15, 1998.
xrefs: gi: 1732198, gi: 1732203
KEYWORDS Hydrolase; Carbohydrate metabolism.
SOURCE Vibrio furnissii
ORGANISM Vibrio furnissii
Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales; Vibrionaceae; Vibrio.
REFERENCE 1 (residues 1 to 399)
AUTHORS Bouma, C.L. and Roseman, S.
TITLE Sugar transport by the marine chitinolytic bacterium Vibrio furnissii. Molecular cloning and analysis of the mannose/glucose permease
J. Biol. Chem. 271 (52), 33468-33475 (1996)
MEDLINE 97125988
PUBMED 8969210
REMARK SEQUENCE FROM N.A.
STRAIN=SR1514

COMMENT

This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. The original entry is available from <http://www.expasy.ch/sprot> and <http://www.ebi.ac.uk/sprot>

[CATALYTIC ACTIVITY] N-ACETYL-D-GLUCOSAMINE 6-PHOSPHATE + H(2)O = D-GLUCOSAMINE 6-PHOSPHATE + ACETATE.
[PATHWAY] N-ACETYL GLUCOSAMINE UTILIZATION PATHWAY.
[SIMILARITY] BELONGS TO THE NAGA FAMILY.

FEATURES

source

Location/Qualifiers

1..399

/organism="Vibrio furnissii"

/db_xref="taxon:29494"

gene

1..399

/gene="MAND"

Protein

1..399

/gene="MAND"

/product="N-ACETYLGLUCOSAMINE-6-PHOSPHATE DEACETYLASE"

/EC_number="3.5.1.25"

ORIGIN

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61 lidshvhgqsq gcdvmdathd slntmsryfa tlgvtafvat tvtapvakir aalaqvaks
121 hdgvdgaeil gaylegpyft eknkgahptq wfrelaveel edwisysdnq llkvalapek
181 tgaldaairy l dahgihvmlg hsdadyeqvk aalaagakgi vhcyngmrgl hhrdpgvvga

241 gllhphcfve miadghhvhp aaidvahrcc gsrmtlitda mratgmpdgg ytlgeyqvdm
301 kqgvvmtssg glagstltll rgvknhrwl nvpieqawlm asytpaeslg iqhqlgslev
361 gkyasmvavs sdfsiektwv kgrlvfdaat sprqealci

//

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[LinkDB]

ENTRY EC 3.5.1.25
NAME N-acetylglucosamine-6-phosphate deacetylase
 acetylglucosamine phosphate deacetylase
 acetylaminodeoxyglucosephosphate acetylhydrolase
 2-acetamido-2-deoxy-D-glucose-6-phosphate amidohydrolase
CLASS Hydrolases
 Acting on carbon-nitrogen bonds, other than peptide bonds
 In linear amides
SYSNAME N-acetyl-D-glucosamine-6-phosphate amidohydrolase
REACTION N-acetyl-D-glucosamine 6-phosphate + H2O =
 D-glucosamine 6-phosphate + acetate
SUBSTRATE H2O
 N-acetyl-D-glucosamine 6-phosphate
PRODUCT acetate
 D-glucosamine 6-phosphate
REFERENCE 1 [UI:68041342]
 White, R.J. and Pasternak, C.A. The purification and properties of
 N-acetylglucosamine 6-phosphate deacetylase from Escherichia coli.
 Biochem. J. 105 (1967) 121-125.
 2 [UI:97141207]
 Yamano, N., Matsushita, Y., Kamada, Y., Fujishima, S., Arita, M.
 Purification and characterization of N-acetylglucosamine
 6-phosphate deacetylase with activity against N-acetylglucosamine
 from Vibrio cholerae non-O1. Biosci. Biotechnol. Biochem. 60 (1996)
 1320-1323.
PATHWAY PATH: MAP00530 Aminosugars metabolism
GENES DME: CG17065
 CEL: F59B2.3
 ECO: b0677(nagA) b3135(agaA)
 ECJ: JW0663(nagA) JW3104(agaA)
 ECE: Z0824(nagA) Z4489
 ECS: ECs0707 ECs4015
 ECC: c0752(nagA)
 STY: STY0721(nagA)
 STM: STM0683(nagA)
 YPE: YPO0838 YPO2626(nagA)
 YPK: y1201(nagA) y3223
 SFL: SF0616(nagA)
 HIN: HI0140(nagA)
 PMU: PM0874(nagA)
 XFA: XF1465
 XCC: XCC3410(nagA)
 XAC: XAC0715(nagA)
 VCH: VC0994 VC1783
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 SME: SMc02878(nagA)
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 CCR: CC0443 CC0534
 BSU: BG12630(nagA)
 BHA: BH0421(nagA)
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 SAM: MW0663(nagA)
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 LLA: L173068(nagA)

SPY: SPy1694 (nagA)
SPM: spyM18 1705 (nagA)
SPG: SPyM3 1475 (nagA)
SPN: SP2056
SPR: spr1867 (nagA)
SAG: SAG0266 (nagA)
SAN: qbs0256
SMU: SMU.435
CAC: CAC0188 (nagA)
CPE: CPE2176 (nagA)
TTE: TTE0232 (nagA)
MPU: MYPU 3690 (nagA)
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MTC: MT3435
CGL: NCgl2556 (Cgl2645)
SCO: SCO4284 (SCD95A.17c)
BLO: BL1344 (nagA)
FNU: FN1133
BBU: BB0151 (nagA)
TEL: t112093
ANA: all0988
DRA: DRA0066
TMA: TM0814
SSO: SSO2673 (nagA)
STO: ST2546
PDB: 1O12

STRUCTURES

DBLINKS

IUBMB Enzyme Nomenclature: 3.5.1.25
ExpASY - ENZYME nomenclature database: 3.5.1.25
WIT (What Is There) Metabolic Reconstruction: 3.5.1.25
BRENDA, the Enzyme Database: 3.5.1.25
CAS: 9027-50-3

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[KEGG | DBGET | GenomeNet]